

# **DESIGNER'S GUIDE**

## **INTRODUCTION:**

This guide is intended to assist the designer in the development of plans for a Transportation Enhancement Project to be let by a local agency. It supplements the "Instructions for Local Agencies in Advertising, Awarding and Administering Federally Funded Transportation Enhancement Projects." It is written for the engineer to provide more detail on the steps necessary to secure MDOT approval of the plans, specification, and estimate (PS&E) package and to meet federal regulations.

Any agency or consultant, who has been through the normal local government federal aid project process, will recognize the terminology and understand the steps that must be followed. Enhancements are federal aid highway projects and follow the same rules and regulations (these differ from other federal programs such as HUD or Block Grant programs). The manner in which compliance is achieved is changed somewhat, but a consultant who is familiar with Federal Highway procedures will have no difficulty in ensuring that these regulations are met.

Only those steps normally done by the engineer are discussed here. The Local Contracting Certification and the TEA Activity Report are non technical documents that should be completed by the local agency. These are covered in the "Instructions."

The material discussed herein will be reviewed at the time of grade inspection.

## **PROGRAMMING:**

This process is the same as a normal local government project. The Program Application for Local Agency Projects form must be submitted. Special attention is directed to the right of way information. Grading permits and easements are considered right of way takings and must be done in accordance with federal highway regulations, which will be discussed later in this guide. Attachment A and part B of Attachment B must be completed if any work is to be done outside the right of way. Agency owned property is considered right of way.

## **PRE GI ACTIVITIES:**

- ▶ State Historic Preservation Office review.
- ▶ Apply for permits (e.g., DEQ) if necessary. This is determined during the environmental assessment.
- ▶ Apply for a road agency permit if the facility is not under agency jurisdiction. Contact the nearest MDOT Transportation Service Center or Regional Office for any work within state highway right of way.
- ▶ Request special review of any work that impacts a traffic signal on a state highway.

- ▶ Identify all utilities within the project limits and contact utility companies if there are potential conflicts.
- ▶ Identify right of way needs - fee, easement, or permit.
- ▶ Contact MDOT Design Division, Local Agency Programs Unit, if there are problems encountered that would require an alteration of the required design standards.

### **RIGHT OF WAY:**

Federal regulations must be followed in acquiring rights to construct any part of the project off existing right of way, even if federal funds are not used to secure these rights or if the right of way is donated. Enhancement projects, by definition, should provide positive impacts on the surroundings; therefore, easements or grading permits should be easy to obtain, if necessary. If the value of the taking is less than \$10,000, no appraisal is necessary if the grantor signs a waiver. Information on complying with federal highway right of way procedures is attached.

### **PLANS:**

The information that should be on the plan sheets is provided on the "Information for Plans." Since the plans will be reviewed by "highway" people and the work will be done by "highway" (prequalified) contractors, plans that look like "highway" plans will be easier to follow and may lead to lower prices or less conflicts during construction.

### **SPECIFICATIONS/PROPOSAL:**

MDOT Standard Specifications for Construction must be used as the basis for all projects. Division I contains many federally required provision that must apply to the project. An index of Division 1 is provided, in which sections containing specific federal requirements and sections that the local agency may wish to consider revising are highlighted. A more detailed discussion of the individual sections will follow. The technical specifications in Division 2 through 8 will work for most projects; however, the designer will be permitted to modify these by special provision to fit the project. MDOT pay items and codes must be used. The use of "included in" and "lump sum" are permitted if it is clear what is included under the bid item.

**The use of NSPE, ACEC, ASCE, CSI, or other "canned" general conditions will NOT be permitted.** These documents contain warranty provisions, which are not allowed. They imply testing and inspection requirements that are not consistent with MDOT procedures. They do not adequately represent the role of the engineer in the project. Most of the other general conditions are addressed in MDOT Standard Specification for Construction.

Local conditions related to contractor qualification, bid acceptance based on other than low bid, warranties, or EEO programs will not be permitted. Cost of construction

engineering or inspections cannot be passed on to the contractor. Most other local provisions can be accepted.

There can be no warranty provisions other than normal manufacturer's. There can be no maintenance provisions.

Brand name products cannot be specified without justification and prior approval by MDOT (rarely given). "Or equal" specifications are permissible, as are suggested suppliers.

"Alternate" or "Add On" (or Deduct) bids will not be allowed.

Required federal provisions are provided on MDOT's web site. These should be placed in the proposal wherever is convenient

Davis Bacon wage rates are required on all federal-aid highway construction contracts that exceed \$2,000 and to all related subcontracts except for projects located on roadways classified as local roads or rural minor collectors or not located within the right-of-way of a federal-aid highway. If Davis Bacon wage rates are not applicable then the state prevailing wage rates must be included.

Links to MDOT required provisions are included on MDOT's web site. These are provisions that must appear in the proposal somewhere. They need not be in the form provided; in fact, some must be rewritten for use in the project.

Should the designer require other MDOT special provisions, such as current HMA mixtures, pavement marking, signing, disposal of contaminated material, bridge painting, etc., these will be provided by MDOT on request.

### **PREQUALIFICATION:**

The designer must establish the desired prequalification level for the project. Information on setting the amount, the classification, and verifying contractor's prequalification is available on MDOT's web site. The prime contractor as well as the subcontractors must be MDOT prequalified prior to the letting date. Refer to [www.michigan.gov/mdotlap](http://www.michigan.gov/mdotlap) then select "Information to Advertise, Let, Award, and Administer Federal Enhancement Projects" and click on "Pre Qualification Information-" for more information.

### **ADVERTISEMENT:**

After receiving a "Notification to Proceed - Advertising" from MDOT, the local agency will advertise the project for bids. Local advertising procedures will be followed unless they conflict with federal regulations. The approved procedure will be contained in an MDOT response to the "Local Contracting Certification" form submitted by the local agency. The address of statewide publications (one of which must be used).

**PROPOSAL CERTIFICATION FORM:**

This form must be completed, signed and sealed by the engineer. It, along with the engineer's estimate and plans, completes the plans, specification & estimate (PS&E) package.

**REQUEST TO ADVERTISE:**

This form is the local agency's responsibility; however, it will most likely be completed by the designer on their behalf. It must be signed by the local agency and submitted, along with the PS&E package for approval to advertise.

**ADDENDA:**

Addenda must have MDOT approval prior to issuance only if they affect the engineer's estimate or the scope of work

**BID TABULATION:**

A certified tabulation of bids must be provided. As a minimum, it must include the unit prices of the three lowest bidders and the total of all other bidders. It must contain a certification that "This is a true and correct copy of bids received, read, and tabulated for this project. Signed \_\_\_\_."

**CERTIFICATION OF CONTRACTOR SELECTION & REQUEST TO AWARD:**

This form is the responsibility of the local agency. If the bid exceeds the engineer's estimate by more than 10 percent, if less than 3 bids were received, or if any bids were rejected, justification needs to be provided. This form should be submitted only after the contractor has provided insurance and bonds.